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## RUINED CITIES OF CENTRAL AMERICA.

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WE have always thought it strange that, while the sources of the Nile or the exact topography of the north or south pole has excited wide and unwearied interest, the past of an American race which has left imperishable monuments of its vigor should, even among ourselves, have been viewed with comparative indifference. The story of the Spanish rule in America is familiarly known to all men. Even in England every schoolboy knows who imprisoned Montezuma and who strangled Atahualpa. But how many Americans of our day have any adequate conception of the stately edifices of monumental Mitla, or of Palenque, with its magnificent palace, its terraces and temples, its pyramids and sculptured ornaments? How many, indeed, have any knowledge whatever of the innumerable splendid relics which, having defied the havoc of time, still crowd the entire nucleus of New Spain, and speak to us so eloquently of a noble culture, reaching back far beyond the conquest. Yet it might have been expected that every American who takes an interest in the history of this continent, or even in the history of the human race, would be curious to know who reared the stately structures which, in importance, far surpass any found in the land of Montezuma. More, no doubt, would be known to us of a territory so full of interest and so close at hand, but for the untimely end of the distinguished traveler John L. Stephens, the lax manner in which the work has been since conducted, and the consequent

ebb in popular interest. It would, however, be unjust to criticise with severity a work which demands more ample means and support than have hitherto been accorded to any of the numerous individuals who have purposed the exploration of these mysterious regions. But we are happy that it should now be in our power to signalize the departure of an expedition to Central America which it is hoped will, through the united efforts of a munificent gentleman and two powerful governments, not only win the good will and support of the local authorities, but also have at its disposal the necessary funds for the proper conduct of such an enterprise.

The expedition will have for its object a systematic investigation of the so-called "ruined cities" and other remains of ancient civilization in Central America and Mexico. It is dispatched under the joint auspices of the Governments of the United States and France. The expense will be jointly defrayed by Mr. Pierre Lorillard, of New York, the original promoter of the undertaking, and by the French Government. The expedition is under the charge of M. Désiré Charnay. It is thoroughly equipped, and comprises an efficient staff. The means are provided not only of photographing bas-reliefs and hieroglyphic inscriptions, but of making careful casts of them by the process of M. Lotin de Laval. Copies of these casts will first be presented to the Smithsonian Institution at Washington, and to the French Government—the latter collection to be permanently preserved in the Trocadéro of Paris. The collection and preservation of these casts will be one of the most distinctive and valuable features of the present enterprise, offering, as they will, to students of all countries, an ample field for investigation, and possibly the materials requisite for a solution of the linguistic problem. The exploring party will visit Mount Alban, Mitla, Palenque, and other great centers of ancient civilization. Its route will lie through Oaxaca, Tehuantepec, and Guatemala, terminating in the peninsula of Yucatan, where the ground is to a great extent fresh. Among the untamable Mayas and other warlike tribes where it is only possible to travel safely in armed force, the party will be able to secure a guard one hundred strong. From an expedition which is favored by such varied advantages, it is hardly unreasonable to expect many valuable and interesting accessions to our knowledge of the ancient and contemporary races of Central America.

Although the idea of equipping such an expedition has for many years been entertained by Mr. Lorillard, yet not only was

its execution originated independently on both sides of the Atlantic—both in France and in America—but two similar though separate enterprises were actually, as often happens, taking form simultaneously. Indeed, it was only while actively engaged in organizing the American party that the present writer became aware of the existence of “another Richmond in the field,” and it augurs well for the success of the undertaking that he encountered no serious difficulty in reconciling and amalgamating what would otherwise have developed into two rival schemes.

As now constituted, the mission bears an international character, though, in fairness to France, we must state that the predominance of American interests has been fully recognized by her. She has gracefully recognized the conspicuous generosity of Mr. Lorillard by permanently associating his name with the proposed collection at Paris; and, among other privileges accorded to America, we may be excused for referring to an official letter of agreement by which the French Minister concedes to us the privilege of laying before the readers of this “Review” the earliest accounts from the pen of the explorer, as he at brief intervals reports the progress of the expedition.

While, however, the scheme has thus in a limited sense a peculiar relation to the United States, it has an equal interest and value for the curious in all parts of the world. The vexed question of origin attracts at once the philosopher and the ethnologist, the theologian and the Darwinian. The historian sees looming through the mist of tradition and pictured hieroglyphics the life of powerful nations. The artist or architect stands mute before the sculptured evidence of marvelous skill and taste, of grand powers of architectural design and engineering resource, in a race of semi-barbarians. And all marvel how nations which have left such noble proofs of their vigor, and which, without the immediate directing influence of any foreign civilization, passed through every stage of social economy, from that of tribal savagery to a golden age of culture and wealth, should have finally perished and vanished utterly from the world's knowledge as though by enchantment. It is not astonishing that the only memorials of their existence—the only links connecting them with the human family—should exercise a strange moral influence. We believe M. Charnay, the chief of the present expedition, to be thoroughly imbued with the spirit in which alone this subject should be approached. His achievements, as a practical *Americanist*, are already known to the world of science. He brings

to his task the experience and reflection so rare, and, in the present instance, so essential to success. Apart from the intimate knowledge of Mexico which he has gained during two previous journeys, he has also traveled widely in the East and in Australasia, and has made a special and comparative study of Javanese antiquities. M. Charnay is the author of two works relating to Mexico—one an entertaining book of travel, the other a singularly valuable contribution on the subject of the antiquities. In the authorship of the latter work, "*Cités et Ruines Américaines*" (Paris, 1863), he was associated with the famous architect, M. Viollet-le-Duc. It is especially remarkable for its great folio album of magnificent photographs. In a traveler of such experience and observation we have every hope that the expedition will possess, what is so vital to its success, an able, enthusiastic, and responsible leader.

Whatever may have been the other causes which combined to prevent any systematic explorations of the present nature, the principal one may no doubt be found in the isolated position of the country and its distance from the world's great thoroughfares. It is curious to observe to what an extent we owe what little knowledge we possess, even of the antiquities, to men who were first attracted to the spot by schemes for the formation of new commercial highways. At the time of the conquest another and most potent reason against systematic exploration lay in the wealthy and alluring kingdom of the neighboring Aztecs, and hither flocked the restless and intrepid spirits of Castile to luxuriate amid the delights of a New World, and to return after a few years laden with the treasures of America.

It is difficult, if not impossible, to conceive the shock which must have been produced on the Continent of Europe by the discovery of America. All the marvels of Eastern fable pale before the vision of a New World emerging like a mirage from the Western seas, peopled by strange races, glorious in the richness of its tropical vegetation, its forests teeming with curious animal forms, its mines reputed to contain inexhaustible stores of gold and gems. The bounds of human empire had suddenly been widened, and the world's compass was increased by an unknown quantity. Soon the American dependencies of the Castilian crown alone embraced a territory almost as large as Europe. From the equator northward and southward, far into the temperate zone, Spanish rule was extended. Thence came gold and silver to be coined in all the mints and curiously wrought in all the jewelers' shops of Europe and

Asia. Soon the cultivation of indigenous and exotic plants, with the enforced labor of slaves, was found to be not an inferior source of wealth, and from the Spanish dominions in America were exported tobacco, chocolate, indigo, sugar, coffee ; nor in this enumeration of their sources of wealth must we omit their exports of hides, cochineal, and quinquina.

Truly this was a land of milk and honey, where, if one would believe some of the chroniclers of the day, the buildings were more sumptuous than the palace of Aladdin, and the very fountains more wonderful than the golden water of Parizade. The lust of gold was the supreme passion of all classes, and, while all efforts were bent on the spoliation and oppression of an ingenious and diligent population, men's minds were turned aside from any serious attention to the relics of a race that had already flourished and decayed. Small wonder, indeed, that the Spanish Viceroy, who, leaving behind him the curses of Mexico, entered Madrid with a long train of gilded coaches and of sumpter-horses, trapped and shod with silver, spared himself the pains of such laborious inquiries. But, although we hear of no investigations on the spot, the New World offered to the thinkers of the day no small field for speculation, and, where knowledge failed, fancy was substituted—to what purpose can best be understood after a perusal of Mr. Bancroft's learned chapter on this subject in his "*Native Races of the Pacific States.*" For illustrations of the spirit in which the problems of the New World were discussed, we need not seek beyond the pages of that great work.

Of the innumerable questions to which the discovery of America gave rise, the most difficult to answer, perhaps, was that regarding the origin of the newly discovered races. Not so thought the theologian, who was content to look upon the aborigines as straggling members of the Hebrew stock, whose ancestors had found their way thither—it did not much matter how—from the primal abode of man in Asia Minor. He saw in the discovery only another evidence of the truth of Holy Writ. Were not these Indians the lost tribes of Israel? In this easy manner was the question settled, then ; but in later times it has again cropped up, to receive answers as diverse as as they are often ridiculous. The theory of an Asiatic immigration obviously was suggested by a certain resemblance between the products of plastic art on the opposite shores of the Pacific, and by the close proximity in the north of the two continents. But, as Friedrich Müller and others have pointed out, the supposed influence of Asia must have shown itself conspicuously in matters of every-day

life—in the simpler industries, in a knowledge of materials, in the common possession of various plants and animals. But in all these circumstances the respective civilizations of America and of China and Japan are wholly different. If, however, the theory of an Asiatic immigration across the Pacific is to be put aside as untenable, what can be said in favor of the theories which connect the red-man with the Mongolian or Samoyed, the Cymric or Gallic Celts, the Polynesian or the Iberian Basque?

The study of language has led to some singular misconceptions. The famous Abbé Brasseur de Bourbourg, a profound but eccentric student of American antiquities, discovered what he thought unmistakable affinities between the Maya and Quiche languages and Greek, Latin, French, English, German, and other languages. These languages, indeed, he regards as derivatives from the Maya-Quiche. But to understand this topsy-turvy doctrine presupposes a knowledge of the Abbé's origin theory. At first his belief was that civilization began in the Occident instead of in the Orient, as has always been supposed. In support of this opinion he cited as his principal authority a Nahua manuscript, which he entitles "*Codex Chimalpopoca*," and which purports to be a history of the kingdoms of Calhuacan and Mexico. Subsequently, however, he sacrificed the theory over which he had spent so much time and labor. The *Codex* began to have for him a new meaning. In an allegorical sense it referred to the mighty cataclysm which submerged the cradle of civilization. From this time Brasseur became a convert to the Atlantis theory, believing that the American Continent originally occupied the Gulf of Mexico and Caribbean Sea, extending so far across the Atlantic as to have possibly included the Canaries. But at a remote period this continent was engulfed by a tremendous convulsion of nature. The continuity of the Americas was destroyed by the submersion which included in its area Yucatan, Honduras, and Guatemala. A subsequent upheaval of the continent was, however, sufficient to restore this portion of the surface. Such is an outline of Brasseur's theory; and, entirely apart from his wild conjectures and still wilder arguments, it is worthy of observation that science has in recent times gone to show that a vast extent of dry land formerly existed between America and Europe. The judgment passed by Mr. Bancroft on the Abbé's speculations is eminently just; he says that, in perusing Brasseur's "*Quatre Lettres*," the reader is "continually harassed by long, rambling digressions—literary no-thoroughfares, as it

were—into which he is beguiled in the hope of coming out somewhere, only to find himself more hopelessly lost than ever ; for any mythological evidence the Pantheons of Phœnicia, Egypt, Hindostan, Greece, and Rome are probed to their most obscure depths ; comparative philology is as accommodating to the theorist as ever, which is saying a great deal ; the opinions of geologists, who never dreamed of an Atlantis theory, are quoted to show that the American Continent formerly extended into the Atlantic in the manner supposed." It is certainly wise, even were Brasseur's original documents obtainable and intelligible, to reject his "double meaning" as an hallucination, and to regard his first rendering of the Codex as more reliable, if indeed any reliance can be placed upon his labors.

The earlier theories furnish many instances of ingenious hypotheses and *naïve* credulity. To those whose sole desire was to make the history of man in America conform to revelation, Noah's ark presented itself as a convenient *deus ex machina*. Lescarbot fails to see why Noah should have experienced any difficulty in reaching America, when—his reason is remarkable—"Solomon's ships made voyages lasting three years." Another opinion is, that the sons of Noah reached America by land ; while Orrio, in order to show that one human pair was equal to the task of populating the Old World and the New, assures us that "one woman can in two hundred and ten years become the ancestor of one million six hundred and forty-seven thousand and eighty-six persons." In support of a derivation from Noah, we are constantly referred to the tradition of a foreign origin and the native flood-myths. According to Lord Kingsborough, who is a willing believer in Scriptural analogies, the Mexican tradition of the deluge bears "unequivocal marks of having been derived from a Hebrew source." But there is little reason to doubt that such of these traditions as are not wholly spurious are in the most essential parts "improved" by the Spanish chroniclers and priests, who were not unaccustomed to draw upon their imaginations for their facts. As a sequel to the flood-myths we come upon traditions of the building of a tower of refuge, and this has led some writers to identify the Americans with certain of the builders of Babel, who were scattered over the earth after the confusion of tongues. Indeed, there is no limit to the fancy of the chroniclers. Fuerites, the chronicler of Guatemala, gives an interesting account of the fabled descent of the Toltecs—the builders of many of the finest structures of Central America—from

the house of Israel. These amusing stories and speculations have their counterpart in the more or less frivolous theories which are put forward in later times without the excuse of being warped by a religious purpose. The Celtic theory is supported upon characteristic grounds. It is based upon the idea that our old friend the Welsh prince Madoc, son of Owen Gwynedd, established his colony in Mexico, and the proof of this startling assertion is threefold. "First, the Mexicans believed that their ancestors came from a beautiful country afar off, inhabited by white people; secondly, they adored the cross; and, thirdly, several Welsh names are found in Mexico." In further corroboration various stories are told which are supposed to point to existing traces of the Welsh colony. A story of this kind, appearing in the "Gentleman's Magazine" for 1740, is told by the Rev. Morgan Jones, and illustrates the heavy drafts that have so frequently been made on public credulity. Along with five companions, the reverend gentleman was taken prisoner by the Tuscarora tribe. Being about to be killed, his life was saved by the accident of a soliloquy in his native tongue. The Indians were able to converse freely in Welsh, and Mr. Jones remained among them for four months, and "did preach to them in the same language three times a week." Again, in 1801, a certain Lieutenant Roberts met an Indian chief at Washington who spoke Welsh as fluently "as if he had been born and brought up in the vicinity of Snowdon." This Indian said this was the language spoken by his tribe, the Asguaws, who preserved the tradition of an origin from beyond sea, and conformed to a law which forbade the acquisition by their children of any other speech till after twelve years of age. Several instances of a similar character are cited in support of the pretensions of the Scotch and Irish to be the progenitors of the Americans, and all one can say is that these claims are just as strong as those, for instance, of the Hellenes and Pelasgians.

But all these theories of the origin of the American races from an Israelitish stock, or from a Kymric or a Gaelic, may be safely dismissed as the fruits of misguided enthusiasm and perverted ingenuity. There remain, then, three hypotheses, each of which has its strenuous advocates, namely: First, that the American races are *autochthonic*, and this was held by Agassiz, in accordance with his doctrine of multiple centers of creation; second, that they are of one blood with the races inhabiting the Eastern Continent, from whom they were separated by the subsidence of the intervening

land ; third, that they represent a migration from Asia *via* Behring Strait or across the Pacific in lower latitudes. Either of the first two hypotheses, could it be proved, would harmonize many apparently conflicting circumstances connected with Mexican civilization. At the same time it would give to that civilization the peculiar interest which must attach to an independent development, presenting a curious and suggestive parallel to that with which we are familiar. True, there are striking resemblances between the architectural styles of America and of several Old World countries, and slight, but seemingly real, though in fact fortuitous, points of affinity in language, while a consensus of traditions shows an aboriginal knowledge of certain countries beyond the sea inhabited by "white-faces." But this is not overwhelming evidence against either the Atlantis or the *autochthonic* theory, and is as nothing indeed compared with the proof that can be adduced against any of the other theories. On the other hand, as has been suggested, the strangeness of the implied connection between the Old World and the New disappears if we admit the possibility—no very unlikely contingency—of stray vessels having found their way at various times to these distant shores. To this slight admixture of foreign elements we might not unreasonably attribute certain striking points of identity existing between the artistic forms of the Eastern and the Western Continent, and which could hardly have had a separate origin in both. They are but few in number, and chief among them are to be named the sphinx-like statues at the base of the pyramid at Izamal, and the representation, on pottery, of elephants equipped for war purposes.

It is difficult to say whether we may expect much new light to be thrown on this phase of the subject from future investigation ; but we can rest assured that a nearer approach will be made to the truth on the acquisition of fuller and clearer knowledge. Until comparatively recent years, in the absence of any well-authenticated account of the remains of Mexican civilization, there was a disposition to regard as apocryphal the glowing descriptions of Cortes and the Spanish chroniclers. Dr. Robertson, the historian, lays it down "as a certain principle that America was not peopled by any nation of the ancient world which had made considerable progress in civilization." In other words, the civilization of America began with the Spanish conquest ! In saying this, Dr. Robinson is only repeating the commonly accepted opinion of his time ; and it may be pleaded in excuse of such an opinion that the ruined monuments of

Central America, which impress us so vividly as the signs of a by-gone prosperity and civilization, were then unknown. The extent and power of that civilization we have had some means of estimating, but no satisfactory conclusion has yet been arrived at regarding its age. It is remarked by Mr. Hubert H. Bancroft that "the tendency of modern research is to prove the great antiquity of American civilization as well as of the American people; and, if either was drawn from a foreign source, it was at a time probably so remote as to antedate all Old World culture now existing, and to prevent any light being thrown on the offspring by a study of the parent stock." This is a curious commentary on the "certain principle" of the distinguished author of "The History of America." Yet there are many, again, who would join issue with Mr. Bancroft on the vexed questions he so ably raises, and on which we have so many and diverse opinions recorded by explorers within the past century. It is, indeed, only within this recent period that we hear of any notable efforts to elucidate the subject of the antiquities. The existence of some of the more important ruins was first discovered in 1750, when a party of Spaniards, traveling in Chiapas, stumbled upon the so-called Casas de Piedras, subsequently named Palenque, after the neighboring village. It was not till 1786 that the King of Spain dispatched the expedition of which Captain Del Rio took charge. To Rio's report was added a commentary by Dr. Paul Felix, in which the people were derived from the Egyptians. This document, after being neglected or withheld by the Government, fell into English hands after the revolution, and an English version was published in 1822. This, the first account of the antiquities given to Europe, failed to awaken public interest, partly, no doubt, because the whole narrative was too novel and startling, too full of gorgeous and vivid tints, to be at once accepted with general credence. Meantime Charles IV of Spain had sent out another expedition, under Captain Dupaix, who was aided by a secretary, a draughtsman, and a detachment of dragoons. The expedition lasted over three seasons, from 1805 to 1807. The drawings and MSS. went out of sight at the time of the revolution, and, some time after, were almost accidentally discovered in the Cabinet of Natural History in Mexico. Twenty-eight years after the date of the expedition, in 1834-'35, Dupaix's work saw the light in the shape of four costly volumes. Then followed Lord Kingsborough's still more expensive work, which, as regards its material, is little more than a rehash of Dupaix, and in respect of its opinions is a storehouse of analogies

in support of the Hebrew theory. Colonel Galendo was the only other practical investigator in the field up to the time of Waldeck's expedition, which lasted over two years, and the funds for which were provided by an association in Mexico. All previous work, however, was far surpassed in excellence by that of Stephens and Catherwood, the accurate, lively narrative of the former being in every way worthy of the remarkable drawings of the latter. During their two visits to the country, they accomplished, by their individual efforts, infinitely more than any of the previous expeditions, bringing to our knowledge upward of forty ruined cities, besides making the most painstaking examination of Copan, Quiche, Palenque, and Uxmal. The region embracing Yucatan, Guatemala, and Nicaragua has also been ably treated by Mr. E. G. Squier, and in the same territory, at Uxmal and Chichen Itza, Waldeck has been carefully supplemented by the labors of M. Désiré Charnay. In our own time we find the number both of theoretical and practical workers increased so largely that we can do no more than name a few such, as Dr. Scherzer, Dr. Boyle, Rosny, Dr. Bernonitti, Stephens Salisbury, Jr., and Larrouza, whose important work in five volumes was published in Mexico, 1875-'79. Last, but of the first importance, we will name Mr. Hubert H. Bancroft's careful work, which is an admirable cyclopædia of the whole subject.

One of the distinctive features of Mexican architecture is the pyramidal form of the buildings or their substructures. On this account, chiefly, an attempt has been made to trace a connection between America and Egypt, in civilization if not in race; but, as Fergusson points out, the two kinds of pyramids are widely different. The towering structure of Mexico, as a matter of fact, is not a pyramid at all in the conventional sense. It is distinguished by the fact that it almost invariably forms the basis of some superstructure. It is, indeed, little more than an arrangement of gradually diminishing terraces; where this is not the case the pyramid is a truncated mound, intended, it is generally thought, as a place of sacrifice. Most of the ruined towns have such mounds, but the great pyramid at Izamal is peculiar in consisting of two pyramidal piles of masonry, one on the top of the other, the base of the whole measuring no less than eight hundred and twenty feet on each side, and the first platform six hundred and fifty feet. The pyramidal form is also finely seen in the Casa del Gobernador at Uxmal, which is described as, of all the structures of the kind, the most stately in form and proportions. Here three successive terraces form the

base which holds aloft the grand ornate building, and add to its look of spacious magnificence. The sculptured ornament at Uxmal is of a special character. It resembles arabesque in its general appearance, but is richly diversified, the parts being wrought into a sort of "sculptured mosaic," having possibly a symbolical meaning. According to Stephens, the carved work is equal to the finest of the Egyptian. It would be impossible, he says, with the best instruments of modern times, to cut stone more perfectly. And yet, as far as is known, the ancient sculptor was ignorant of the existence of iron, and had to rely in the formation of his tools upon chert or flint. Add to this the difficulty of quarrying large masses of stone, conveying them long distances through a rough country, and of raising them to great altitudes, and the construction of these vast edifices seems truly marvelous. But it is not our present intention to discuss at length the subject of Mexican civilization, aware as we are that matters of the greatest interest would arrest the attention at every step. We must leave the antiquities to the future consideration of M. Charnay.

Yet, for the benefit of readers who may be unacquainted with the results of antiquarian research in Yucatan and the neighboring states of Mexico and Central America, we will venture upon a rapid sketch of the ruins of Uxmal, and also note a few of the principal objects of interest to be found at Palenque.

The site of Uxmal is in the northwestern portion of Yucatan, about latitude  $20^{\circ} 25'$  north, and longitude  $89^{\circ} 45'$  west. It is as yet impossible to determine with any approach to certainty the ends which its ruined edifices were designed to serve, but it is at least highly probable that they were originally palaces, temples, council-halls, and courts of justice; possibly some of them may even have been monasteries or community-houses in which the ascetics of a religion analogous to that of Buddha lived in common. But this is a problem which can be solved, if at all, only by a thorough exploration of the fast-crumbling ruins, and patient discussion of the results by competent archæologists.

The buildings at Uxmal have received from the people names supposed to express the character of their original occupancy. Thus we have the House of the Governor, that of the Nuns, that of the Dwarf, and so forth. Or they bear names founded on some peculiarity of their ornamentation or architecture, as the "House of the Old Woman," so called on account of a stone figure of an old woman found on the ground in front of it; or the "House of

the Pigeons," the meaning of which is explained below. The Governor's House (*Casa del Gobernador*) is thirty feet in height, has a frontage of three hundred and twenty-two feet, with a depth of thirty-nine feet, and stands upon three great terraces. It is built entirely of stone. Below the cornice, which extends around the entire building, the front, rear, and lateral elevations are plain; but all above "is one solid mass of rich, complicated, and elaborately sculptured ornaments forming a sort of arabesque." In the front are eleven doorways reaching nearly to the cornice, each surmounted with imposing decorations, but the central doorway is distinguished from all the others by the elaborateness of its ornamentation, as also by the fact that above it are sculptured characters evidently hieroglyphic.

The rear elevation has no doorways, windows, or openings of any kind. The ornamentation above the cornice is less elaborate than on the front. The two ends also are less ornate, but each has one doorway. The roof is flat, and was originally covered with cement; it is now overgrown with a luxuriant vegetation.

The internal plan of all the buildings is essentially the same; that of the *Casa del Gobernador* is as follows: First, a wall extending from end to end divides the interior into two narrow halls, which are again subdivided by walls, running from front to rear, into a number of separate chambers. Each front chamber communicates with the one back of it, by a doorway through the central wall. The three terraces on which this great building rests are of artificial construction, and were supported by substantial walls of stone. The lowest terrace is three feet high, fifteen feet broad, and five hundred and seventy-five feet long; the second twenty feet high, two hundred and fifty feet wide, and five hundred and forty feet in length; the third, nineteen feet high, thirty feet broad, and three hundred and sixty feet in length.

On the platform of the second terrace is another remarkable building, the *Casa de las Tortugas*, or House of the Turtles, so called on account of the row of tortoises sculptured on the cornice. It is ninety-four feet in front and thirty-four feet deep. Like the principal building of its group, its exterior decoration is restricted to the portion above the cornice, but it differs from the *Casa del Gobernador* in that its ornamentation is extremely chaste and simple. This striking monument of the architectural genius of a vanished people is unfortunately little better now than a mass of ruins.

At no great distance from the House of the Turtles stand two

buildings, each one hundred and twenty-eight feet long and thirty feet deep, each apparently the counterpart of the other, and facing one another, with an interval between them of seventy feet. The sides by which they confront each other are ornamented with sculpture, and each appears to have been surrounded by a colossal serpent in stone. In the center of both is seen, set in the façade, a fragment of a great stone ring, four feet in diameter. There are no openings whatever in the walls, whether doorways or windows. Stephens had a breach made in the wall of one of these structures, to the depth of over eight feet, and found only rough stones loosely thrown together, but no chamber. What possible use could these curious buildings have served?

Like the Casa del Gobernador, the Casa de las Monjas, the Nuns' House, stands on three terraces. It is quadrangular, with a courtyard in the center. The front, which is two hundred and seventy-nine feet long, is ornamented above the cornice with sculptures no less elaborate than those of the Governor's House. In the middle is a wide doorway and passage leading to the courtyard, and on each side are four doorways affording entrance to as many separate apartments. There are no exterior doorways in the other three buildings of the Casa de las Monjas. The four façades overlooking the courtyard present the most elaborate specimens of the sculptor's art anywhere to be seen in Uxmal. The four buildings constituting this quadrangle are divided into chambers by longitudinal and transverse walls, as in the Casa del Gobernador, except that in the front building there is no communication between the front and the rear row of chambers. One of these buildings incloses a smaller and older one, the latter being, presumably, like the "Holy House of Loretto," a house made venerable in the eyes of the devout by some miraculous event.

The House of the Dwarf stands on the summit of an artificial elevation eighty-eight feet in height, and incased in stone. Some sixty feet up the face of this mound, on a projecting platform, stands a building divided into two chambers. Its front is the most elaborately ornamented of any building in Uxmal, and is made to represent some dread semi-human monster. The wide doorway is the mouth; the lintel is carved to represent teeth; above are the eyes still perfectly distinct, though the nose has disappeared by the ravages of time. The crowning structure, the House of the Dwarf, is seventy-two feet in front and only twelve feet deep. The ornamentation is extremely chaste. The three chambers into which the

interior is divided have no communication with each other. Stephens holds it to be "beyond doubt" that the House of the Dwarf was a great temple of idols, in which human sacrifices were once offered.

The building known as Casa de Palomas, or House of the Pigeons, is two hundred and forty feet long. It is in a very dilapidated condition. How it got its name is best explained in the words of Stephens: "Along the center of the roof," says he, "running longitudinally, is a range of structures built in a pyramidal form, like the fronts of some of the old Dutch houses that still remain among us, but grander and more massive. These are nine in number, built of stone, about three feet thick, and have small oblong openings through them. These openings give them somewhat the appearance of pigeon-houses, and from this the name of the building is derived." Through a wide doorway in the middle of this building there is a passage into a courtyard, bounded on the right and left by ruined buildings. At the lower end of the court is a range of buildings in ruins which have also a passage through the middle, opening into a second courtyard, with a *teocalli* or House of God, about fifty feet high, at the opposite end. Like the House of the Dwarf, the building on this *teocalli* is divided into three apartments.

Such are the principal edifices still to be seen in ruins at Uxmal. But Uxmal is only one among many places—*primus inter pares*—in Yucatan, where these interesting monuments of antiquity are to be found. The remains of Palenque are still more imposing than those of Uxmal, while for the artist and the antiquarian they possess an interest that can hardly be exaggerated. To say nothing of the six noble buildings themselves which remain, known as the palace and casas No. 1, No. 2, No. 3, No. 4, and No. 5, and which exhibit a bolder architectural genius than we see at Uxmal, though no new architectural principle is introduced, the specimens of plastic art, the spirited bas-reliefs, and the numerous hieroglyphic tablets with which these buildings are decorated within and without, suffice to insure for Palenque preëminent rank among these ancient American cities.

Palenque is situated in the Mexican State of Chiapas, latitude 17° 30' north, longitude 92° 25' west. If a circle were described so as to inclose all the ruins, its area, according to Stephens, would not exceed that of the Battery Park in New York—a very considerable area for a "city." But it might have once occupied a far greater area. Being solidly constructed of stone laid in mor-

tar, these buildings which remain could for generations withstand the elements, while the frail tenements of the lower classes, and even the houses of the upper class, would disappear and leave no sign. The tropical forest in its irresistible advance has, as it were, trampled into the earth the hovels of the poor and the mansions of the rich ; it is only a question of time when the palaces of the kings and the shrines of the gods will succumb to the same fate.

Of the six Palenque buildings we can notice only one, the Palace. Even of that, room is wanting here for a detailed description ; and of its numerous courts, chambers, and corridors we can particularize only one or two. This "palace," as it has been justly called, for it was in every respect a fit abode for the ruler of the state, is a one-storied structure twenty-five feet high, two hundred and eighty-four feet front, and one hundred and eighty feet deep. It stands upon a pyramidal elevation forty feet high, three hundred and ten feet front and rear, and two hundred and sixty feet on each side. This mound was originally faced with stone on all sides, and doubtless had stone steps, but the stones have long since fallen away, and now are heaped at the base of the pyramid. A pyramidal tower rises from near the middle of the palace projecting two stories above the roof, which is flat, and coated with cement. The entire building, or group of buildings, was constructed of dressed stone laid in a mortar of sand and lime, and the front was coated with stucco and painted in various bright colors. The cornice, which extends all round the building, is supported on stone piers about seven feet wide, between each pair of which is a doorway nine feet wide. Of these doorways there are fourteen in front, and there the piers were ornamented with bas-reliefs, some of which still remain as irrefragable proof of a very high artistic development. These bas-reliefs would of themselves appear to be enough to confute the theory according to which Palenque, Uxmal, and the other sites of ruins in this portion of the American Continent are only "pueblos," groups of "communal houses" such as still exist and are still inhabited in New Mexico. All of the edifices which remain of Palenque, Uxmal, etc., are richly, even profusely decorated, while the "communal houses" of the pueblos are void of all attempt at ornamentation. Indeed, to suppose that a community of barbarians would erect for themselves such palaces as these, is to attribute to them a degree of refinement never yet attained even by what is known in England as "the upper middle class."

An idea of the high artistic merit of these bas-reliefs can only

be obtained by an inspection either of the originals or of their reproductions in drawings or photographs, such as illustrate Stephens's or Charnay's volumes. In future numbers of the Review, many of these interesting monuments of indigenous American art will be illustrated with engravings after photographs to be taken by the Lorillard expedition. Suffice it, therefore, for the present, to describe roughly one of this series of bas-reliefs as a specimen of the whole. Here are seen three human figures, one of which, the principal personage, stands erect, while the other two are sitting cross-legged on the ground, the one before, the other behind him. They are all in profile, and they all exhibit a very remarkable facial angle of about forty-five degrees, as if the head above the ears had been compressed in infancy so as to assume a peaked shape. The attire of the principal figure consists of a bonnet of plumes ornamented with sundry devices, a short vest or cape, probably of feather-work (though it might be of mail), decorated with studs, and faced with a sort of breastplate, a belt around the waist supporting a close-fitting tunic made of the skin of some animal; finally, moccasins ornamented with feather-work at the top. In his hands he holds a curiously branched staff or scepter. The other two figures are naked, save that both wear wide belts. The border of this bas-relief is richly ornamented; the work measures, within the border, ten feet in height and six feet in width.

Entering at one of the doorways, we find ourselves in a grand corridor which extends the whole length of the front of the palace, and back of that is another corridor of nearly the same length—about two hundred feet. From this inner corridor doorways give access to the principal court, which occupies nearly one fourth of the whole interior. It were vain, without diagrams and figures, to attempt to convey an idea of the ground-plan of this edifice, or of its ornamentation, and we content ourselves with simply enumerating a few of the objects of interest which meet the eye. The principal court adjoins the inner corridor, as we have said, and occupies the northeast corner of the building, which itself faces eastward. Crossing the inner corridor, we descend a grand stone stairway, each of whose steps is thirty feet in length, to the floor of the court; there is a similar stairway at the opposite or western end, and the distance between the two is about seventy feet, while in the other direction the court measures eighty feet. These stairways are situated in the middle of their respective sides of the court, and the piers to the right and left of them are adorned with

bas-reliefs of the same general character as that described above, while the walls on which the piers rest have carved on them monstrous colossal figures nine or ten feet high. The court is encumbered with growing trees and with *débris*, so that excavations have to be made in order to obtain a view of the figures. Above the piers is a heavy cornice highly ornamented. "Every time we descended the steps," says Stephens, "the grim and mysterious figures stared us in the face, and it (the courtyard) became to us one of the most interesting parts of the ruins. We were exceedingly anxious to make excavations, clear out the mass of rubbish, and lay the whole platform bare ; but this was impossible. It is probably paved with stone or cement ; and, from the profusion of ornament in other parts, there is reason to believe that many curious and interesting specimens may be brought to light. This agreeable work is left for the future traveler, who may go there better provided with men and materials, and with more knowledge of what he has to encounter ; and, in my opinion, if he finds nothing new, the mere spectacle of the courtyard entire will repay him for the labor and expense of clearing it."

The pyramidal tower of the palace is in itself an enigma. It is thirty feet square at its base. Stephens, on entering this tower from one of the corridors of the palace, found within it another tower distinct from the outer one, and a stone staircase so narrow that a large man could not ascend it. This staircase ends at a stone ceiling which closes all further passage, the last step being only six or eight inches below it.

Among the most remarkable bas-reliefs found in the palace is a stone tablet set in a wall of a corridor adjoining the tower. This now famous tablet, which is four feet long and three feet wide, contains two figures with hieroglyphics in the spaces to the right and left of them. The principal figure, which is nude, sits in the Buddha attitude, cross-legged, on a couch ornamented with two heads of jaguars. The other figure bears a ludicrous likeness to an old woman arrayed in old-fashioned modern gown and cape. She is offering to the god, if god it be—or perhaps goddess—what appears to be a plumed bonnet, to take the place of the incomprehensible head-gear of the deity.

All of these bas-reliefs have inscribed on them hieroglyphics, but there are in the palace no hieroglyphical tablets, such, for instance, as exist in casa No. 1. In that building both of the corner-piers of the façade are covered with hieroglyphics, and besides these there

are three great hieroglyphic tablets, two of which are each thirteen feet long and eight feet high, and each divided into two hundred and forty squares. These tablets are a sealed book, and toward their interpretation not even a beginning has been made.

Whether or not it will be in human power to decipher these and the rest of American hieroglyphics, and to give to history the annals they so vainly strive to tell, is a question yet to be settled. In any event, however, one of the main objects of the expedition, the reproduction of the most important inscriptions, has every prospect of accomplishment. This will bring within the reach of all concerned, both in Europe and in America, problems not unworthy the attention of the highest human intellects. Nor is it unreasonable to expect that some new Champollion will do for the early annals of our continent what has been already so amply done for the history of ancient Egypt. It is true that the quiet student at Paris or Washington will, of necessity, remain cold to some of the emotions naturally evoked by the monuments which attest the prosperity of what once was one of the fairest and most populous regions of the earth. He will, perhaps, not be stirred by the feelings which have moved enthusiastic travelers. It will not be in his power to feel with Stephens when, in the midst of desolation and ruin, he conjured up the past, dispelled the gloomy forest, and fancied every structure perfect, with its terraces and pyramids repeopled, and overlooking an immense inhabited plain. The scholar will not, perhaps, so readily as the traveler, call back into life the strange people whom Stephens fancied gazing at him in sadness from the walls of Palenque—the same people who had once, clad in fanciful costumes, adorned with plumes and feathers, ascended the terraces of the palace and the steps leading to the temples. But, though the future investigator may have no share in the genial enthusiasm of the traveler, he will have at his command all the materials that the most diligent research can obtain, for throwing light upon the origin and history of this interesting population. In careful casts and distinct photographs he will possess faithful representations of every monument. In effect he will have before his eyes Copan with all its mysteries, its columns scored with hieroglyphics, its rows of death's heads on the sculptured walls, its nameless kings and gods; and to his unimpassioned research we must trust to bring before us once more the old faith of an ancient and mighty priesthood, and the lost knowledge and strange arts of a cultivated and vanished people, whose ruins can be compared only with the ruins

of Rome in her glory. America, it has been said, is without traditions, has no past. But, just as geology shows that this Western Continent is really the "Old World," so archæological research will perhaps show that man and human civilization are as ancient here as in Europe. However that may be, these venerable monuments appeal with special force to Americans of the present day, not only on account of their value as purely scientific data, but also because they supply the links which connect us with the past.

THE EDITOR.